

MAMMALOGY.—*A new species of murine opossum (genus Marmosa) from Peru.*

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Mammals collected by representatives of the Pan American Sanitary Bureau during investigations of plague in Peru and Ecuador are being studied in the U. S. National Museum. Among these specimens are two murine opossums (*Marmosa*) from the western flank of the Andes in central Peru which are strikingly different from other named forms. They are the northernmost representatives of a group that includes the species *elegans*, *janetta*, *marmota*, and *pusilla*, inhabiting parts of Chile, Argentina, Bolivia, and Paraguay. The place of capture is almost a thousand miles northwest of the known range of their nearest relative.

For the opportunity to study these specimens, which have been deposited in the National Museum, I am indebted to Dr. Fred L. Soper, Director, and Dr. E. C. Chamberlayne, adviser, Communicable Diseases Branch, Pan American Sanitary Bureau, Washington, D. C. I am also grateful to Dr. Philip Hershkovitz, Chicago Natural History Museum, for the loan of comparative material of *M. janetta* and *M. marmota*.

This animal is named in honor of the late George H. H. Tate, whose revision of the genus *Marmosa* (Bull. Amer. Mus. Nat. Hist. 66 (1): 1-250, 1933) went far toward bringing order to an extremely complex group.

***Marmosa tatei*, n. sp.**

*Holotype*.—U.S.N.M. no. 302915; adult male, skin and skull (skinned from alcohol); collected December 1955, by José Maria de la Barrera; Chasquitambo (710 m, lat. 10° 18' 48" S., long. 77° 37' 20" W.), Ancachs, Peru; original number 53/139.

*Distribution*.—Known only from the type locality.

*Description* (of holotype; coloration possibly slightly altered by 3 months immersion in alcohol; capitalized color terms from Ridgway, 1912, *Color standards and color nomenclature*).—Fur long (12 mm on rump, 8 mm on anterior abdomen) but not woolly or wavy; mass effect of

dorsum between Benzo Brown and Fuscous, rather sharply distinguished from sides, which are Mouse Gray, washed on mid-flanks with Drab; dark dorsal patch extends forward as a thin line to snout; flank color extends on dorsal surfaces of forearms and legs to wrists and ankles; face much paler than dorsum or flanks, about Drab-Gray; black eye-ring prominent, 2 mm wide around eye and extending 4 mm behind and 8 mm in front of eye; longest labial vibrissa 33 mm; ears dark gray, long and broad; antihelix large; spina heliis not lobed; underparts white, hairs gray-based toward sides; throat gland large; feet and hands small, pure white; claws short (2 mm); external anterior and posterior pads of hind foot separate; pads between second and third and third and fourth hind toes subequal, the latter slightly smaller; tail relatively short, incrassated (about 8 mm thick near base before skinning), basal two-thirds sharply bicolor (Fuscous-Black above, white below), distal third whitish, extreme tip (13 mm) pure white; body-fur extends only 5 mm on base of tail; scales of tail in annular arrangement, about 32 rows per centimeter at base.

The paratype, U.S.N.M. no. 302916, a young adult by Tate's scale (*op. cit.*), is similar to the holotype in coloration but is slightly brighter. Its tail is very sharply bicolor proximally, the dorsal portion being almost black; the distal 10 mm are pure white.

Skull strong, heavily built, and relatively angular; nasals slightly expanded anterior to frontomaxillary suture, acute posteriorly; interorbital region broad anteriorly, tapering to narrowest point at "postorbital constriction" of Tate (*op. cit.*); supraorbital ridges indistinct, forming slight triangular postorbital prominences, continuous with temporal ridges which converge to form a low crest on frontals, parietals, and interparietals, where they merge with prominent lambdoidal crests; braincase narrow; zygomata thick and heavy; palate in the younger specimen exceedingly fenestrated, in the adult less so but still with large posteroexternal vacuities; posterior margin of palate produced into a thick wall 7 mm high, recurved over palate; "palatal

bridge" (alisphenoid-ethmoid portion of basi-cranium) long and very narrow; auditory bullae relatively far apart, large, and attenuated anterointernally into pointed processes.

Canine strong (crown of upper canine measuring 3.3 mm in height from alveolus);  $P^2$  without distinct cingulum;  $P^3$  higher and longer than  $P^2$ ; molars relatively broad (crown of  $M^4$  in transverse diameter 2.4 mm).

*Measurements* (of holotype, in millimeters, taken according to Tate's directions (*op. cit.*)).—Basal length 30.7, greatest length 33.4, zygomatic breadth 17.9, palatal length 17.7, least breadth

across pterygoid wings of alisphenoids 2.0, breadth of auditory bulla 3.5, greatest breadth across auditory bullae 10.5, greatest breadth across styloid processes of petrosals 8.8, greatest length from anterior wall of auditory bulla to posterior border of petrosal 5.8, greatest breadth of palate across outer corners of  $M^3$  9.6, maxillary tooth row ( $M^{1-3}$ ) 5.1, greatest length of nasals 14.2+, greatest breadth of single nasal 1.5, breadth of postorbital constriction 5.0, breadth of braincase 12.2. Head and body 123, tail vertebrae 132, hind foot 16, ear from notch 22, greatest breadth of ear 19.

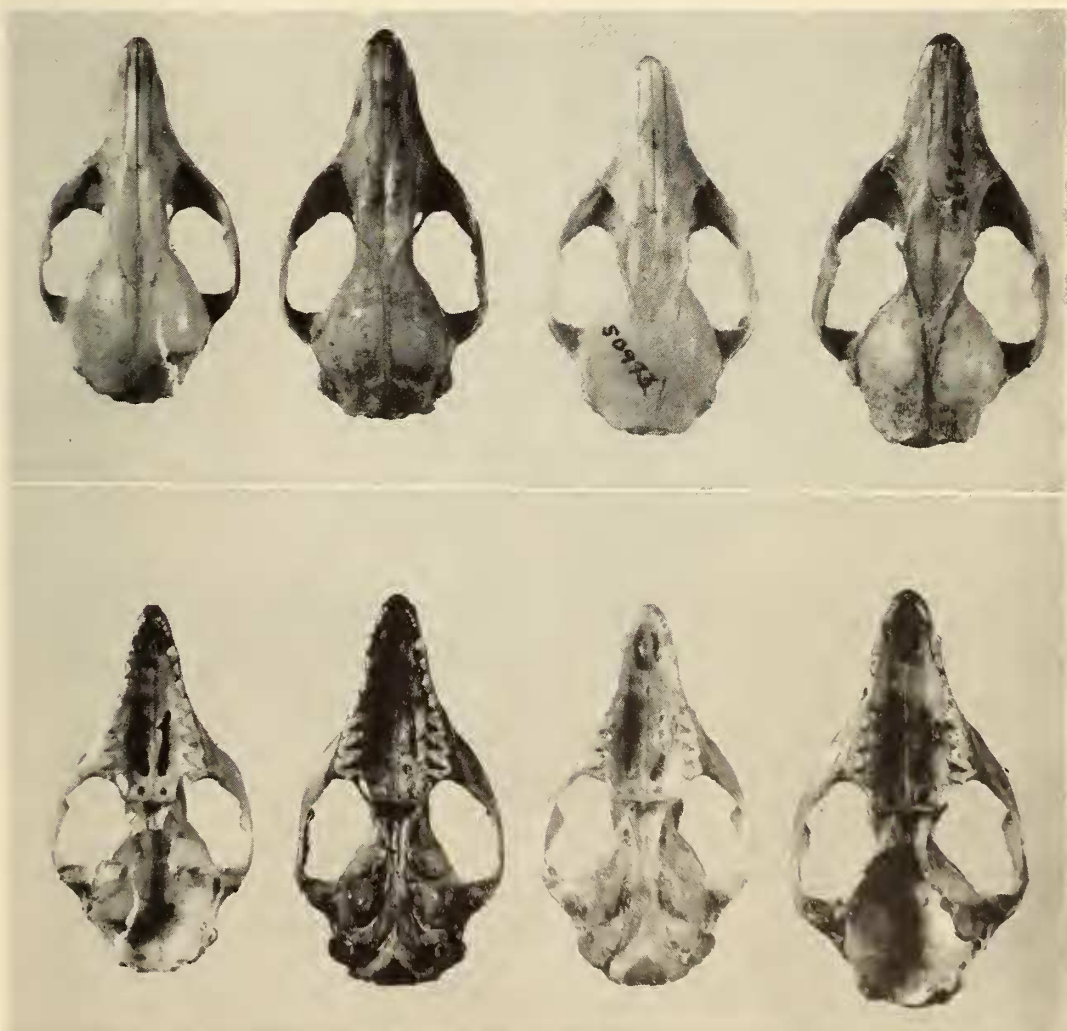


Fig. 1.—Skulls of *Marmosa tatei* and its relatives. Upper row, dorsal aspect; lower row, ventral aspect; left to right: *M. elegans*, Guillermo Mann 101; *M. tatei*, U.S.N.M. no. 302915; *M. janetta*, C.N.H.M. no. 50973; *M. marmota*, C.N.H.M. no. 26760.

*Comparisons.*—Sharply defined dorsal and flank colors; large ears; small hands and feet; short, thick tail with annular arrangement of scales; slightly expanded nasals; highly fenestrated palate; long, narrow palatal bridge; large auditory bullae; and large P<sup>3</sup> stamp *M. tatei* as a member of the *Marmosa elegans* group. Large size, narrowed postorbital region, narrow braincase, and convergent temporal ridges relate it to the *elegans* section of that group (Fig. 1).

Numerous characters distinguish *M. tatei* from all other members of the *elegans* section: Dorsal coloration grayer, tail more extensively white tipped, nasals more expanded anterior to fronto-maxillary suture and more acute posteriorly, temporal ridges converging to form a more prominent sagittal crest, palatal bridge narrower, canines longer, and molars relatively broader. It most resembles *M. marmota* of southern Paraguay (C.N.H.M. no. 26760) but is smaller, and has a narrower skull, less distinct supra-orbital ridges (thus interorbital region smoother

and less angular), a more extensive eye-ring, and whiter underparts. *M. tatei* is similar in size and proportions to *M. janetta* of southern Bolivia (C.N.H.M. 29169, 29170, 50972, and 50973), but otherwise is distinguished by having underparts whiter, auditory bullae larger; P<sup>3</sup> larger; interorbital region broader anteriorly, narrower posteriorly, not constricted before postorbital process, and lacking prominent supraorbital ridges. *M. tatei* is more remotely related to *M. elegans* of Chile (U.S.N.M. nos. 1705 and 269806), from which it differs in having whiter underparts, blacker, more extensive eye-ring; much more heavily ossified skull; and interorbital region much broader anteriorly.

*Remarks.*—Members of the *elegans* section are widespread, seldom collected opossums. The forms *marmota*, *janetta*, *tatei*, and *elegans* are well differentiated, but collecting in intermediate areas might show some or all of them to be conspecific.

*Specimens examined.*—Two from the type locality.

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#### NEWS OF MEMBERS

The International Business Machines Corporation has announced plans for a new research center, employing 1,600 persons, to consolidate all fundamental research aimed at improving the company's products. The laboratory will be under the direction of Dr. EMANUEL R. PIORE.

GEORGE GAMOW was awarded UNESCO's Kalinga prize for 1956 in recognition of his out-

standing interpretation of science to the general public. He received £1,000 sterling and an invitation to spend a month visiting and lecturing in India.

DONOVAN S. CORRELL has joined the staff of the Texas Research Foundation as chief botanist and head of the Botanical Laboratory.

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*Man's work must ever end in failure,  
Unless it bears the stamp of mind.  
The head must plan with care and thought,  
Before the hand can execute.*—SCHILLER